UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/740,263	12/18/2000	Keith Barraclough	8X8S.223PA	5757

40581 7590 08/09/2007

CRAWFORD MAUNU PLLC
1270 NORTHLAND DRIVE, SUITE 390
ST. PAUL, MN 55120

EXAMINER	
VAN HANDEL, MICHAEL P	
ART UNIT	**PAPER NUMBER**
2623	
MAIL DATE	**DELIVERY MODE**
08/09/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/740,263
Filing Date: December 18, 2000
Appellant(s): BARRACLOUGH ET AL.

Eric J. Curtin
Robert J. Crawford
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 5/01/2007 appealing from the Office action mailed 7/11/2006.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

5,574,964	Hamlin	11-1996
2005/0251827	Ellis et al.	11-2005
5,410,326	Goldstein	4-1995

6,611,537	Edens et al.	8-2003
4,837,798	Cohen et al.	6-1989
5,835,126	Lewis	11-1998

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

1. Claims **1-6, 8-16, 21, 23-28, 30, 32-36, 42-49, 51, 53-59, 63-66, 68, 70,** and **74** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamlin (USPN 5,574,964) in view of Ellis et al (US Pub. No. 2005/0251827), cited by Examiner.

Regarding claim **1**, the claimed arrangement for processing external-services data for use in a user facility is met as follows:

- The claimed audio, video, and data signal bussing arrangement adapted to distribute audio, video, and data to designated points in the user facility is met by the communication bus 36, which serves to receive information from external services and communicate the information to the network [col. 3, lines 3-12].
- The claimed plurality of telephony-based appliances communicatively coupled to the bussing arrangement, wherein the plurality of appliances provide bi-directional telephony services using at least one of: audio, video, and data signals is met by the plurality of interface pods 44, which can interface a plurality of appliances [col. 3, lines 13-18; Col 1, Lined 10-25; Col 1, Lines 33-40; Col 2, line 58-Col 3, Line 2; Col 7, Lines 9-20].

- The claimed "at least one data memory circuit adapted to store external services data and adapted to store configuration data" is only partially met by the Hamlin reference. Hamlin teaches system database storage 48 within the system controller that holds information on the status of the distribution system 10. The database 48 stores information that is useful in configuring and controlling the system [col. 4, lines 16-27]. The Hamlin reference does not teach that external services data can be stored in a data memory circuit. The Ellis reference cures this deficiency in teaching a server 80, as the primary device in the home [Fig. 5 and paragraph 0074]. The server, as taught with reference to a separate embodiment, handles data distribution tasks and stores local information. The server may be used to implement a client-server based interactive television program guide system. Also, the server 42 may be capable of handling text, graphics, and video [paragraph 0062]. It would have been clearly obvious to one of ordinary skill in the art at the time of the invention to implement the "converter/system controller" of Hamlin like the server taught by Ellis, in order to use a typical client-server architecture in the home for storing and serving video and other data to devices in the home, just as the typical server does on a much larger scale.
- The claimed programmable network interface unit (NIU) adapted to store external services data in the memory circuit and to communicatively couple the stored external services data from the memory circuit to the plurality of appliances in the user facility via the bussing arrangement as a function of the configuration data in

the memory circuit is met by converter 34, which serves to receive the external services data and send it to the bussing arrangement [col. 3, lines 3-13]. As noted above, the Hamlin reference does not discuss that the external services data can be stored on the converter. The Ellis reference, however, does teach that the in-home server 80 can store and serve video to users throughout the home via a bussing arrangement [paragraphs 0062 and 0074]. The configuration data stored in the system database storage 48, as discussed above, is used and taught by the Hamlin reference to monitor and control activity throughout the home [col. 4, lines 16-27]. It would have been clearly obvious to one of ordinary skill in the art at the time of the invention to implement the "converter/system controller" of Hamlin like the server taught by Ellis, in order to use a typical client-server architecture in the home for storing and serving video and other data to devices in the home, just as the typical server does on a much larger scale.

- The claimed user input device adapted access the data stored in the memory circuit, to program the programmable NIU by providing the configuration data and to command the NIU to process the external-services data for use at a particular one of the plurality of appliances in the user facility is met by the remote controller 42, which allows for input of programming and use information [col. 5, lines 34-45]. Furthermore, in the client-server architecture as taught by the Ellis reference, a data input device 140 or remote control 54 [Fig. 10] can be used to request information stored at the server for display at the user device [paragraphs 0085-0065].

Regarding claim **2**, the claimed user input device including one of the plurality of appliances is met by the remote controller's 42 ability to control directly or indirectly the system controller 38 [col. 5, lines 34-45].

Regarding claim **3**, the claimed plurality of appliances including at least one of a TV, a phone, a computer, a printer, a videophone, a videocassette recorder, an analog recorder, a digital recorder, a stereo, a camera, a wireless phone, an intercom, an audio speaker, and a pager is met by the Receiving Units (TVs, VCRs, Computers, phones, etc.).

Regarding claim **4**, the claimed user input device including at least one of: a TV, a phone, a computer, a videophone, a videocassette recorder, a wireless phone, an audio speaker, a pager, a remote control, a modem, a voice recognition system, an Internet access device, a keypad, and a touch screen is met by the remote controller 42.

Regarding claim **5**, the claimed bussing arrangement including at least one of: a coaxial cable, a telephony line, a Ti line, an ISDN line, a DSL line, an infrared transmitter, a wireless transmitter, a telephone modem, a wireless modem, a cable modem, a broadband modem, and a computer network is met by the CABLE 30, AOSL 32, TELEPHONE 37, and other forms of mass media signals as discussed in column 2, lines 59-67.

Regarding claim **6**, the claimed user input device including a television remote adapted to select NIU commands from a display generated by the NIU and displayed on the television is met by the system controller 38 and the remote controller 42 of the system controller, which has a human input device 55 and a display device 45 for configuring the reception and configuration of the system [col. 3, lines 59-65 & col. 5, lines 34-45].

Regarding claim **8**, the claimed NIU being further adapted to configure the external services data for use at a particular one of the plurality of appliances is met by the converter 34, which converts the mass media signals into a signal that is transmitted along a communication bus 36 for delivery to an interface pod 44 and converted for playback on the appropriate device [col. 3, lines 3-23].

Regarding claim **9**, the claimed external services data including audio and video data, wherein the NIU is adapted to configure the audio data for use at an audio appliance and to configure the video data for use at a video appliance is met by the mass media signals, such as video, audio, and various other types of electronic mass media information [col. 1, lines 47-52] being delivered to the home, converted, sent to the communication bus and utilized according to the format type on a audio appliance or video appliance.

Regarding claim **10**, the claimed arrangement for processing external-services data for use in a user facility, according to claim 1, wherein the NIU includes the data memory circuit is not met fully by the Hamlin reference. While Hamlin does teach that the system controller contains system database storage 48 for storing configuration information, he does not teach that the external-services data can be stored at the converter/controller. The Ellis reference cures this deficiency in teaching a server 80, as the primary device in the home [Fig. 5 and paragraph 0074]. The server, as taught with reference to a separate embodiment, handles data distribution tasks and stores local information. The server may be used to implement a client-server based interactive television program guide system. Also, the server 42 may be capable of handling text, graphics, and video [paragraph 0062]. It would have been clearly obvious to one of ordinary skill in the art at the time of the invention to implement the "converter/system

controller" of Hamlin like the server taught by Ellis, in order to use a typical client-server architecture in the home for storing and serving video and other data to devices in the home, just as the typical server does on a much larger scale.

Regarding claim **11**, the claimed NIU being adapted to store incoming external services data at the data memory circuit until a routing command is received from the user input device, and to route the external services data directly from the data memory circuit in response to the received routing command is met by remote controller 42, which allows for input of programming and use information [col. 5, lines 34-45]. Furthermore, in the client-server architecture as taught by the Ellis reference, a data input device 140 or remote control 54 [Fig. 10] can be used to request information stored at the server for display at the user device [paragraphs 0085-0086]. The server may be used to implement a client-server based interactive television program guide system. Also, the server 42 may be capable of handling text, graphics, and video [paragraph 0062]. It would have been clearly obvious to one of ordinary skill in the art at the time of the invention to implement the "converter/system controller" of Hamlin like the server taught by Ellis, in order to use a typical client-server architecture in the home for storing and serving video and other data to devices in the home, just as the typical server does on a much larger scale, in which users can utilize the input devices to request stored information, much like is done in a video on demand system which is commonplace in the art.

Regarding claim **12**, the claimed user input device being adapted to communicate with the NIU and determine the type of external-services data that is stored is met by the remote controller 42, which allows for input of programming and use information [col. 5, lines 34-45]. Furthermore, in the client-server architecture as taught by the Ellis reference, a data input device

140 or remote control 54 [Fig. 10] can be used to request information stored at the server for display at the user device [paragraphs 0085-0086]. The server may be used to implement a client-server based interactive television program guide system. Also, the server 42 may be capable of handling text, graphics, and video [paragraph 0062]. It would have been clearly obvious to one of ordinary skill in the art at the time of the invention to implement the "converter/system controller" of Hamlin like the server taught by Ellis, in order to use a typical client-server architecture in the home for storing and serving video and other data to devices in the home, just as the typical server does on a much larger scale, in which users can utilize the input devices to request stored information, much like is done in a video on demand system which is commonplace in the art.

Regarding claim **13**, the claimed user input device being adapted to determine the source of the external-services data is met by the system database storage 48, within the system controller 38, which serves to store information on the incoming signal and it's frequency and source [col. 4, lines 16-29].

Regarding claim **14**, the claimed NIU being adapted to store configuration information in the data memory circuit, wherein the configuration information includes routing information for external services data, again, is met by the RAM, ROM, and system database storage, which serve to store information about incoming signals and therefore, properly route the signals along the communication bus to the appropriate devices [col. 3, line 59 – col. 4, line 33].

Regarding claim **15**, the claimed external-services data including data having a first data form, wherein the NIU is adapted to convert the external services data into a second data form for use by a particular one of the plurality of appliances is met by converter 34, which serves to

convert from the input media signal into a media signal that the interface pods 44 can utilize and output to the device [col. 3, lines 3-23].

Regarding claim **16**, the claimed first data form including packet-based data, and the second data form including non-packet-based data is met by the converter 34 being able to convert from mass media signals or internet signals to a signal that is communicated on the communication bus 36.

Regarding claim **21**, the claimed plurality of appliances including a TV, wherein the NIU is adapted to display the configuration of the plurality of appliances on the TV screen is met by the system controller 38, which is one of the plurality of appliances and contains a display device 45 for display of the configuration and user operation therewith [col. 3, lines 59-65].

Regarding claim **23**, the claimed user input device being adapted to command the NIU based upon the configuration display on the TV screen is met by the control of the system by the human input device 55 via the display device 45 of system controller 38.

Regarding claim **24**, the claimed one of the plurality of appliances including a display, wherein the NIU is adapted to display the stored incoming external services data on the display is met by the inclusion of the television in the network, which can be directed by the system controller 38 to display information from the system database storage 48, such as data from the external services [col. 4, lines 16-33].

Regarding claim **25**, the claimed user input device being adapted to command the NIU based upon the displayed incoming external services data is, again, met by the inclusion of the television in the network, which can be directed by the system controller 38 to display

information from the system database storage 48, such as data from the external services [col. 4, lines 16-33].

Regarding claim **26**, the claimed NIU being adapted to display email, audio messages, and video messages, and wherein the user input device is adapted to respond to an input corresponding to the displayed information and to command the NIU to route the displayed information to a particular one of the plurality of appliances is met by the ability of the system to follow user input to provide programming information to the appropriate appliance through user prompts and selections [col. 5, lines 34-48].

Regarding claim **27**, the claimed digital memory circuit coupled to the NIU, wherein the external services data is digital data and is stored in the digital memory circuit is, again, met by converter 34, which serves to receive the external services data and send it to the bussing arrangement [col. 3, lines 3-13]. As noted above, the Hamlin reference does not discuss that the external services data can be stored on the converter. The Ellis reference, however, does teach that the in-home server 80 can store and serve video to users throughout the home via a bussing arrangement [paragraphs 0062 and 0074]. The configuration data stored in the system database storage 48, as discussed above, is used and taught by the Hamlin reference to monitor and control activity throughout the home [col. 4, lines 16-27]. It would have been clearly obvious to one of ordinary skill in the art at the time of the invention to implement the "converter/system controller" of Hamlin like the server taught by Ellis, in order to use a typical client-server architecture in the home for storing and serving video and other data to devices in the home, just as the typical server does on a much larger scale.

Regarding claim **28**, the claimed external services data being stored at a location external from the NIU is met by the ability to store the data at a user device VCR as taught by the user routing the signal from the converter to the other VCR for recording [col. 5, lines 46-60].

Regarding claim **30**, the claimed user input device being coupled to the bussing arrangement and using the bussing arrangement to command the NIU is met by the system controller 38, which is one of the devices on the bussing arrangement and is used to control converter 34.

Regarding claim **32**, the claimed user input device being adapted to send control signals to the NIU that are configured to enable the control of external-data services including at least one of: caller ID information, address book information, pay-per-view access information, downloadable multimedia information, dynamically allocable telephone numbers, call forwarding, message on hold, directory assistance, and household systems control information is met by the discussion of the downloading of stock information, which is downloadable multimedia information through the NIU [col. 6, line 66 – col. 7, line 8].

Regarding claim **33**, the claimed NIU including a printed circuit board (PCB) having at least one general processor and at least one specific processor adapted to process video data is met by the discussion of the converter and the extension boards that can be purchased to process more data [col. 7, lines 21-24].

Regarding claim **34**, the claimed PCB including a RISC processor is, again, met by the discussion in column 7, lines 21-24. The inclusion of a RISC processor, while commonly known in the art, is not a patentable distinction over claim 33, and is therefore rejected on the same grounds.

Regarding claim **35**, the claimed PCB including a DSP processor is, again, met by the discussion in column 7, lines 21-24. The inclusion of a DSP processor, while commonly known in the art, is not a patentable distinction over claim 33, and is therefore rejected on the same grounds.

Regarding claim **36**, the claimed each of the plurality of appliances being adapted to deliver status information signals to the NIU including the status of the appliance sending the signal, further comprising a user interface device adapted to access and provide the status information to a user is met by the system database storage 48, which has the ability to monitor the status of the interface pods and devices on the network by monitoring the activity at each location [col. 4, lines 16-27].

Regarding claim **42**, the claimed appliance interface device coupled to an appliance and to the bussing arrangement and adapted to receive a first type of signal and convert the data signal to a second type of data signal is met by the interface pods 44, which serve to couple the appliance to the bussing arrangement and convert the signal carried on the communication bus to a signal that is intelligible by the appliance [col. 4, lines 28-51].

Regarding claim **43**, the claimed appliance interface device being further adapted to receive a signal via a first type of communications line and to transmit the signal via a second type of communications line is met by the converter within the interface pods 44, which can receive information from the communication bus and transmit it via a wireless link or analog link [col. 4, lines 28-51].

Regarding claim **44**, the claimed appliance interface device being programmable via a user input is met by the system controller 38, and it's ability to program and control the NIUs and the interface pods.

Regarding claim **45**, the claimed appliance interface device being programmable by an external-services provider via the NIU is met by the system database storage 48, which can store information sent in through the NIUs and use the information to program and utilize the interface pods.

Regarding claim **46**, the claimed network interface system for interfacing different types of communication systems including a first user-based communication system and a packet-based communication system is met as follows:

- The claimed data memory circuit adapted to store configuration data and packet-based data from the packet-based communication system is only partially met by the Hamlin reference. Hamlin teaches system database storage 48 within the system controller that holds information on the status of the distribution system 10. The database 48 stores information that is useful in configuring and controlling the system [col. 4, lines 16-27]. The Hamlin reference does not teach that external services data can be stored in a data memory circuit. The Ellis reference cures this deficiency in teaching a server 80, as the primary device in the home [Fig. 5 and paragraph 0074]. The server, as taught with reference to a separate embodiment, handles data distribution tasks and stores local information. The server may be used to implement a client-server based interactive television program guide system. Also, the server 42 may be capable of handling text,

graphics, and video [paragraph 0062]. It would have been clearly obvious to one of ordinary skill in the art at the time of the invention to implement the "converter/system controller" of Hamlin like the server taught by Ellis, in order to use a typical client-server architecture in the home for storing and serving video and other data to devices in the home, just as the typical server does on a much larger scale.

- The claimed telephony-based user communication device is met by the system controller 38 and remote controller 42, used to communicate with the system.
- The claimed processor arrangement adapted to write configuration data into and read configuration data from the memory circuit and to provide data for presenting configuration information for accessing at the telephony-based user communication device, further adapted to process data received from, and exchange processed data between, the first user-based communication system and the packet-based communication system, and, in response to the configuration data, also adapted to route selected information provided by the packet-based communication system and to route data stored at the data memory circuit to selected channels of the first user-based communication system is met by the system controller 38 in conjunction with the converter 34 and the interface pods 44, which all serve to exchange processed data between the communication bus 36 and the external mass media providers. In the case of the Ellis reference, the input device 140 or the remote control 54 can be used to request information from the stored information at the server [paragraphs 0085-0086]. The server may be

used to implement a client-server based interactive television program guide system. Also, the server 42 may be capable of handling text, graphics, and video [paragraph 0062]. It would have been clearly obvious to one of ordinary skill in the art at the time of the invention to implement the "converter/system controller" of Hamlin like the server taught by Ellis, in order to use a typical client-server architecture in the home for storing and serving video and other data to devices in the home, just as the typical server does on a much larger scale, in which users can utilize the input devices to request stored information, much like is done in a video on demand system which is commonplace in the art.

- The claimed user input means for inputting configuration-defining control signals, wherein the processor arrangement responds to the configuration-defining control signals by changing the configuration data in the memory circuit and by rerouting selected information provided by the packet-based communication system to selected channels of the first user-based communication system according to the configuration-defining control signals is met by the human input device 55 and/or remote controller 42 for controlling the system controller 38, in an attempt to configure and re-route data according to the appliance and interface pod that the data will be viewable on.

Regarding claim **47**, the claimed network system coupled to the first user-based communications system is met by communication bus 36, which couples the network together.

Regarding claim **48**, the claimed user input means including at least one of: an IR key panel, a wall-mount unit for the system, a TV, a telephone, a computer, a videophone, a

videocassette recorder, a wireless phone, a remote control, a modem, a voice recognition system, an Internet access device, a keypad, and a touch screen is met by the human input device 55 and/or remote controller 42.

Regarding claim **49**, the claimed processor arrangement being further adapted to write configuration data into the memory circuit in response to signals received from the packet-based communication system is met by the ability for the user to control the system controller 38 and reconfigure the system based on the system database storage 48, in an attempt to configure and route information on the packet-based communication system as necessary [col. 3, line 59 – col. 4, line 33].

Regarding claim **51**, the claimed user communication device including at least one of: a TV monitor, a printer, and computer is met by the system controller 38, having a display device 45, and CPU 43 [col. 3, lines 59-65].

Regarding claim **53**, the claimed user input means including a computer adapted to communicate on the Internet is met by the discussion of the connection via an ADSL line, which can provide Internet Connections [col. 2, lines 59-67].

Regarding claim **54**, the claimed packet-based communication system including at least one of: a cable modem, a wireless modem, a broadband modem, a telephone modem, a DSL, a T1 line, and a computer network is met by the modem coupled to the system controller as discussed in column 4, lines 9-15.

Regarding claim **55**, the claimed network interface system for interfacing different types of communication systems including a first user-based communication system and a packet-based communication system is met as follows:

- The claimed data memory circuit adapted to store data including packet-based data received via the packet-based communication system is only partially met by the Hamlin reference. Hamlin teaches system database storage 48 within the system controller that holds information on the status of the distribution system 10. The database 48 stores information that is useful in configuring and controlling the system [col. 4, lines 16-27]. The Hamlin reference does not teach that external services data can be stored in a data memory circuit. The Ellis reference cures this deficiency in teaching a server 80, as the primary device in the home [Fig. 5 and paragraph 0074]. The server, as taught with reference to a separate embodiment, handles data distribution tasks and stores local information. The server may be used to implement a client-server based interactive television program guide system. Also, the server 42 may be capable of handling text, graphics, and video [paragraph 0062]. It would have been clearly obvious to one of ordinary skill in the art at the time of the invention to implement the "converter/system controller" of Hamlin like the server taught by Ellis, in order to use a typical client-server architecture in the home for storing and serving video and other data to devices in the home, just as the typical server does on a much larger scale.
- The claimed user communication device is met by the system controller 38 and remote controller 42, used to communicate with the system.
- The claimed processor arrangement adapted to write data-intercept select data into and read data-intercept select data from the memory circuit and to provide data

for communicating with a user via the communication device, further adapted to process data received from, and exchange processed data between, the first user-based telephone communication system and the packet-based communication system, and, in response to the data in the data memory circuit, also adapted to intercept information from the packet-based communication system and to store the intercepted information in the data memory circuit is met by the system controller 38 in conjunction with the converter 34 and the interface pods 44, which all serve to exchange processed data between the communication bus 36 and the external mass media providers. In the case of the Ellis reference, the input device 140 or the remote control 54 can be used to request information from the stored information at the server [paragraphs 0085-0086]. The server may be used to implement a client-server based interactive television program guide system. Also, the server 42 may be capable of handling text, graphics, and video [paragraph 0062]. It would have been clearly obvious to one of ordinary skill in the art at the time of the invention to implement the "converter/system controller" of Hamlin like the server taught by Ellis, in order to use a typical client-server architecture in the home for storing and serving video and other data to devices in the home, just as the typical server does on a much larger scale, in which users can utilize the input devices to request stored information, much like is done in a video on demand system which is commonplace in the art.

- The claimed user means for inputting message-retrieval control signals, wherein the processor arrangement responds to the message-retrieval control signals by

displaying messages from the data memory circuit is met by the human input device 55 and/or remote controller 42 for controlling the system controller 38, in an attempt to configure and re-route data according to the appliance and interface pod that the data will be viewable on.

Regarding claim **56**, the claimed user input means being at least one of: an IR key panel, a wall-mount unit for the system, a TV, a telephone, a computer, a videophone, a videocassette recorder, a wireless phone, a remote control, a modem, a voice recognition system, an Internet access device, a keypad, and a touch screen is met by the human input device 55 and/or remote controller 42.

Regarding claim **57**, the claimed processor arrangement being further adapted to write data-intercept select data into the memory circuit in response to signals received from the packet-based communication system is met by the ability for the user to control the system controller 38 and reconfigure the system based on the system database storage 48, in an attempt to configure and route information on the packet-based communication system as necessary [col. 3, line 59 – col. 4, line 33].

Regarding claim **58**, the claimed processor arrangement being further adapted to write data-intercept select data into the memory circuit in response to signals received from the input means is met by the system controller 38 in conjunction with the system database storage 48 and human input device 55, which serve to reconfigure data in the memory, allowing for routing of information and data as desired by the user.

Regarding claim **59**, the claimed user communication device including a TV monitor is met by the system controller 38, having a display device 45, and CPU 43 [col. 3, lines 59-65].

Regarding claim **63**, the claimed user communication device including a computer adapted to communicate on the Internet is met by the discussion of the connection via an ADSL line, which can provide Internet Connections [col. 2, lines 59-67].

Regarding claim **64**, the claimed packet-based communication system including at least one of: a cable modem, a wireless modem, a broadband modem, a telephone modem, a DSL, a T1 line, and a computer network is met by he modem coupled to the system controller as discussed in column 4, lines 9-15.

Regarding claim **65**, the claimed method for controlling communications data in a communications system having a NIU, a user interface device, a plurality of telephony-based communications appliances, and a bussing system is met as follows:

- The claimed step of using the user interface device and programming the NIU with configuration information for external-services data is met by the discussion of the system database storage 48, which serves to store configuration information for the mass media providers, the configuration information programmed by the user via the system controller 38 [col. 3, line 59 – col. 4, line 27].
- The claimed step of receiving external-services data at the NIU is met by the converter's 34 ability to receive information from mass media providers.
- The claimed step of "storing the received external services data in a memory circuit" is partially met by is met by converter 34, which serves to receive the external services data and send it to the bussing arrangement [col. 3, lines 3-13]. As noted above, the Hamlin reference does not discuss that the external services data can be stored on the converter. The Ellis reference, however, does teach that

the in-home server 80 can store and serve video to users throughout the home via a bussing arrangement [paragraphs 0062 and 0074]. The configuration data stored in the system database storage 48, as discussed above, is used and taught by the Hamlin reference to monitor and control activity throughout the home [col. 4, lines 16-27]. It would have been clearly obvious to one of ordinary skill in the art at the time of the invention to implement the "converter/system controller" of Hamlin like the server taught by Ellis, in order to use a typical client-server architecture in the home for storing and serving video and other data to devices in the home, just as the typical server does on a much larger scale.

- The claimed step of configuring the stored external-services data and transferring the configured data via the bussing arrangement to one of the telephony-based communications appliances is met by the communication bus 36, which serves to send the information (according to the system database storage 48) to each interface pad 44, after having received the media from the converter 34 [col. 3, lines 3-23].
- The claimed step of receiving the transferred external-services data at the one communications appliance is met by the reception of the data via the communication bus 36 at the interface pod 44 and eventually the receiving unit 46.

Regarding claim **66**, the claimed step of programming the data receiving unit with configuration information including programming routing information for routing the external-services data to particular ones of a plurality of communications devices is met by column 4,

lines 9-33, wherein the ability to configure and route data appropriately throughout the system is disclosed.

Regarding claim **68**, the claimed plurality of communications devices including an Internet device, wherein the routing data includes the assignment of a particular Internet protocol address to the Internet device is met by the modem discussed in column 4, lines 9-15 and the ability for the routing data to contain interface pod address locations [col. 4, lines 9-27].

Regarding claim **70**, the claimed step of using the user interface device and programming the NIU with configuration information for external-services data including programming from an external-services provider location, wherein the configuration information controls the type of external services that the NIU passes to the plurality of communications devices is met by the system controllers ability to configure the system database storage 48 with information received via a mass media signal [col. 4, lines 16-27].

Regarding claim **74**, the claimed external-services provider location programming the NIU with a packet-based access package is met by the discussion of the modem being used to program the system controller through a digital line protocol engine [col. 4, lines 9-15].

2. Claims **20** and **50** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamlin US patent 5,574,964, cited by examiner, in view of Ellis et al (US Pub. No. 2005/0251827), cited b y examiner, in further view of Goldstein US patent 5,410,326, cited by examiner.

Regarding claim **20**, Hamlin and Ellis teach all of that which is discussed above with regards to claim 1. Neither Hamlin nor Ellis teach the inclusion of a security code in the input

device, wherein the NIU is further adapted to respond only to commands having the security code. Goldstein discloses a system in which the converter responds to only commands sent from a remote control with a specific identification number, for security purposes [col. 4, lines 57-65]. It would have been obvious to one of ordinary skill in the art at the time of the invention to use a security code in the remote controller, in order to allow for tighter security and use by only those authorized users.

Regarding claim **50**, Hamlin and Ellis teach all of that which is discussed above with regards to claim 46. Neither Hamlin nor Ellis teaches the reconfiguration of the processor arrangement in response to a user-provided security code. Goldstein discloses a system in which the converter responds to only commands sent from a remote control with a specific identification number, for security purposes [col. 4, lines 57-65]. It would have been obvious to one of ordinary skill in the art at the time of the invention to use a security code in the remote controller, in order to allow for tighter security and use by only those authorized users.

3. Claims **7**, **22**, **29**, **31**, **37-41**, **67**, and **75** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamlin US patent 5,574,964, cited by examiner, in view of Ellis et al (US Pub. No. 2005/0251827), cited by examiner, in further view of Edens et al US patent 6,611,537, cited by examiner.

Regarding claim **7**, Hamlin and Ellis teach all of that which is discussed above with regards to claim 1. Neither Hamlin nor Ellis teaches that the user input device includes a telephone adapted to select NIU commands from a command menu programming into the NIU.

Edens et al teach a system that detects a "ring" on an analog PSTN line and uses the "ring" to control the processing functionality of the system using DTMF dialing [col. 96, lines 36-46]. It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the ability to control the system over a telephone connection (as taught by Edens et al) in order to allow for remote controllable processing and programming within the system.

Regarding claim **22**, Hamlin and Ellis teach all of that which is discussed above with regards to claim 21. Neither Hamlin nor Ellis teach that the configuration data includes telephone data including at least one of: the telephone number assigned to the phone, call waiting options, caller ID options, answering options, forwarding options, message storage options, call blocking options, and call screening options. Edens et al teach a system in which call configuration data, in the form of caller ID is delivered to the system [col. 96, lines 36-46]. It would have been obvious to one of ordinary skill in the art at the time of the invention to deliver caller ID information with the call in order to allow for easy viewing of caller identification and integration/use with pre-existing systems.

Regarding claim **29**, Hamlin and Ellis teach all of that which is discussed above with regards to claim 1. Neither Hamlin nor Ellis teaches that the processor of the NIU is adapted to function as an answering machine for incoming telephony calls. Edens et al teach a system that has an integrated recorder for use as an answering machine for incoming phone calls [col. 107, line 60 – col. 108, line 2]. It would have been obvious to one of ordinary skill in the art at the time of the invention to include answering machine functionality in order to allow for easy recording of telephone messages and integration/use with pre-existing systems and infrastructures for phone-call delivery.

Regarding claim **31**, Hamlin and Ellis teach all of that which is discussed above with regards to claim 30. Neither Hamlin nor Ellis teach configuration information being received by the NIU in the form on DTMF tones, wherein the bussing arrangement includes a two-wire analog system, and wherein the user input device is adapted to send control signals to the NIU including DTMF tones. Edens et al teach a system that detects a "ring" on an analog PSTN line and uses the "ring" to control the processing functionality of the system using DTMF tones [col. 96, lines 36-46]. It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the ability to control the system over a telephone connection using DTMF tones (as taught by Edens et al) in order to allow for remote controllable processing and programming within the system using pre-existing DTMF functionality.

Regarding claim **37**, Hamlin and Ellis teach all of that which is discussed above with regards to claim 1. Neither Hamlin nor Ellis teaches a plurality of appliances including a microphone adapted for use in an intercom system. Edens et al teach a system that utilizes a microphone for use as a monitoring/speakerphone/intercom system [col. 97, lines 7-15]. It would have been obvious to one of ordinary skill in the art at the time of the invention to include an intercom system, in order to allow for a fully functional and easily interactable home automation system, in which telephone system integration was utilized to its fullest extent.

Regarding claim **38**, Hamlin, Ellis, and Edens et al teach all of that which is discussed above with regards to claim 37. Neither Hamlin nor Ellis teach the claimed monitoring device coupled and adapted to receive audio signals from the microphone and, responsive to detecting an audio signal above a threshold level, send an alert signal to a user via the NIU. Edens et al disclose a monitoring device, which utilizes two audio streams and a speakerphone system to

alert another user of audio information [col. 97, lines 7-15]. It would have been obvious to one of ordinary skill in the art at the time of the invention to include monitoring system, in order to allow for a fully functional and easily interactable home automation system, in which telephone system integration was utilized to its fullest extent.

Regarding claim **39**, Hamlin, Ellis, and Edens et al teach all of that which is discussed above with regards to claim 38. Neither Hamlin nor Ellis teaches that the microphone is located near an infant, and the system is used to monitor the infant. Edens et al disclose the aforementioned system and even suggest its use as a baby monitor [col. 97, lines 7-15]. It would have been obvious to one of ordinary skill in the art at the time of the invention to include monitoring system, in order to allow for a fully functional and easily interactable home automation system, in which telephone system integration was utilized to its fullest extent.

Regarding claim **40**, Hamlin, Ellis, and Edens et al teach all of that which is discussed above with regards to claim 39. Neither Hamlin nor Ellis teaches that the alert includes a page signal. Edens et al disclose the aforementioned system and even suggest its use as a baby monitor for alerting a parent of infant noises (via the speakerphone system) [col. 97, lines 7-15]. It would have been obvious to one of ordinary skill in the art at the time of the invention to include monitoring system, in order to allow for a fully functional and easily interactable home automation system, in which telephone system integration was utilized to its fullest extent.

Regarding claim **41**, Hamlin, Ellis, and Edens et al teach all of that which is discussed above with regards to claim 38. Neither Hamlin nor Ellis teaches that the microphone is adapted to monitor noise for security monitoring. Edens et al disclose a monitoring system for monitoring noise within a household [col. 97, lines 7-15]. It would have been obvious to one of

ordinary skill in the art at the time of the invention to include monitoring system, in order to allow for a fully functional and easily interactable home automation system, in which telephone system integration was utilized to its fullest extent.

Regarding claim **67**, Hamlin and Ellis teach all of that which is discussed above with regards to claim 66. Neither Hamlin nor Ellis teaches that the routing data includes the assignment of a particular telephone number to the telephony device. Edens et al disclose a system for multi-line conferencing, which can utilize multiple telephones, each with their own telephone number [col. 96, lines 36-46]. It would have been obvious to one of ordinary skill in the art at the time of the invention to include telephone phone number identification, in order to allow for a fully functional and easily interactable home automation system, in which telephone system integration was utilized to its fullest extent.

Regarding claim **75**, Hamlin and Ellis teach all of that which is discussed above with regards to claim 70. Neither Hamlin nor Ellis teaches that the external-services provider location programs the NIU with a telephony-based access package. In order for the telephones within the Edens et al system to interact with the outside world, an access package is provided through the POTS server 186 to take care of controlling Multiple Phones. It would have been obvious to one of ordinary skill in the art at the time of the invention to include a telephone package system for use with multiple phones at one premises, in order to allow for a fully functional and easily interactable home automation system, in which telephone system integration was utilized to its fullest extent.

4. Claims **17-19**, **52**, and **60-62** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamlin US patent 5,574,964, cited by examiner, in view of Ellis et al (US Pub. No. 2005/0251827), cited by examiner, in further view of Cohen et al US patent 4,837,798, cited by examiner.

Regarding claim **17**, Hamlin and Ellis teach all of that which is discussed above with regards to claim 15. Neither Hamlin nor Ellis teaches that the first data form includes word processing data, and the second data form includes audio data. Cohen et al teach multiple data forms for use in a unified system (text and audio being two of those data forms) [see Abstract]. It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the two data forms and conversion techniques from one to the other, in order to create a more comprehensive and consistent facility.

Regarding claim **18**, Hamlin, Ellis, and Cohen et al teach all of that which is discussed above with regards to claim 17. Neither Hamlin nor Ellis teaches that the first data form includes an email message, and the NIU is adapted to read and convert the email into an audio message. Cohen et al teach a conversion from e-mail message to voice/audio message using the text-to-speech technology. It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the two data forms (e-mail and audio) and conversion techniques from one to the other, in order to create a more comprehensive and consistent facility.

Regarding claim **19**, Hamlin and Ellis teach all of that which is discussed above with regards to claim 15. Neither Hamlin nor Ellis teaches that the first data form includes audio data, and the second data form includes word processing data. Cohen et al disclose a system that can

convert among multiple forms of data (including text and voice). Figures 7 and 8 clearly indicate the transmissions from e-mail to text and from text to e-mail using appropriate engines. It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the two data forms (e-mail and audio) and conversion techniques from one to the other, in order to create a more comprehensive and consistent facility.

Regarding claim **52**, Hamlin and Ellis teach all of that which is discussed above with regards to claim 46. Neither Hamlin nor Ellis teaches a voice-generating unit adapted to produce prerecorded messages. Cohen et al disclose a system that can generate voice from text using a text-to-speech engine [col. 2, line 67 – col. 3, line 3] and store them within the system for use as prerecorded messages. It would have been obvious to one of ordinary skill in the art at the time of the invention to use the text-to-speech engine in order to create a more comprehensive and consistent facility for managing messages of all types.

Regarding claim **60**, Hamlin and Ellis teach all of that which is discussed above with regards to claim 55. Neither Hamlin nor Ellis teaches a voice-generating unit adapted to produce prerecorded messages. Cohen et al disclose a system that can generate voice from text using a text-to-speech engine [col. 2, line 67 – col. 3, line 3] and store them within the system for use as prerecorded messages. It would have been obvious to one of ordinary skill in the art at the time of the invention to use the text-to-speech engine in order to create a more comprehensive and consistent facility for managing messages of all types.

Regarding claim **61**, Hamlin, Ellis, and Cohen et al disclose all of that which is discussed above with regards to claim 60. Neither Hamlin nor Ellis teaches that the voice-generating unit audibly produces the prerecorded messages over the user communication device.

Cohen et al disclose that the message recipient has a single controllable point of contact where all messages can be scanned and/or viewed [Abstract]. This indicates that the prerecorded messages can be reproduced at the user communication device. It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize a voice-generating unit to audibly produce prerecorded messages, in order to create a more comprehensive and consistent facility for managing messages of all types.

Regarding claim **62**, Hamlin, Ellis, and Cohen et al disclose all of that which is discussed above with regards to claim 61. Neither Hamlin nor Ellis teaches that the prerecorded messages are audibly produced at a sound level over that of the first audio signal. Cohen et al disclose a system in which the user can select which audio signal to make audible [col. 2, lines 57-68]. To make an audio signal audible, it would have to be louder than the first audio signal. It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize a voice-generating unit to audibly produce prerecorded messages, in order to create a more comprehensive and consistent facility for managing messages of all types.

5. Claims **69** and **71-73** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamlin US patent 5,574,964, cited by examiner, in view of Ellis et al (US Pub. No. 2005/0251827), cited by examiner, in further view of Lewis US patent 5,835,126, cited by examiner.

Regarding claim **69**, Hamlin and Ellis teach all of that which is discussed above with regards to claim 66. Neither Hamlin nor Ellis teaches that the routing data includes the assignment of a particular television subscription package to the TV. Lewis discloses a system

that utilizes an Account/Billing System 106 in order to deliver subscription packages to the televisions in the network. Column 3, lines 50-57 and column 6, lines 25-33, make it clear that the system being implemented utilizes some sort of subscription package to manage accounts and billing. It would have been obvious to one of ordinary skill in the art at the time of the invention to include subscription package details, in order to allow for pay-per-view movies and more options for standard interactive television within the home system.

Regarding claim **71**, Hamlin and Ellis teach all of that which is discussed above with regards to claim 70. Neither Hamlin nor Ellis teaches that the external-services provider location programs the NIU with a television subscription package. Lewis discloses a system that utilizes an Account/Billing System 106 in order to deliver subscription packages to the televisions in the network. Column 3, lines 50-57 and column 6, lines 25-33, make it clear that the system being implemented utilizes some sort of subscription package to manage accounts and billing. It would have been obvious to one of ordinary skill in the art at the time of the invention to include subscription package details, in order to allow for pay-per-view movies and more options for standard interactive television within the home system.

Regarding claim **72**, Hamlin, Ellis, and Lewis teach all of that which is discussed above with regards to claim 71. Neither Hamlin nor Ellis teaches that the television subscription package includes a specified number of television sets that can use the television data. Lewis discloses a system that utilizes an Account/Billing System 106 and a Video Control System 104 in order to deliver subscription packages to multiple televisions in the network. Column 3, lines 50-57 and column 6, lines 25-33, make it clear that the system being implemented utilizes some sort of subscription package to manage accounts and billing. It would have been obvious to one

of ordinary skill in the art at the time of the invention to include subscription package details, in order to allow for pay-per-view movies and more options for standard interactive television within the home system.

Regarding claim **73**, Hamlin, Ellis, and Lewis teach all of that which is discussed above with regards to claim 71. Neither Hamlin nor Ellis teaches that the television subscription package includes a pay-per-view event. Lewis discloses a system that utilizes an Account/Billing System 106 in order to deliver subscription packages to multiple televisions in the network. Column 3, lines 50-57 and column 6, lines 25-33, make it clear that the system being implemented utilizes some sort of subscription package to manage accounts and billing. It would have been obvious to one of ordinary skill in the art at the time of the invention to include subscription package details, in order to allow for pay-per-view movies and more options for standard interactive television within the home system.

(10) Response to Argument

Regarding claims **1-75**, the appellant argues that all section 103 rejections must be reversed, because the proposed combinations of the references do not teach or suggest all of the claimed limitations and are further unmotivated. The examiner respectfully disagrees.

Argument 1: The Section 103 rejections of claims 1-6, 8-16, 21, 23-28, 30, 32-36, 42-49, 51, 53-59, 63-66, 68, 70, and 74 must be reversed; the cited references do not teach or suggest the claimed limitations, and the proposed modification of the

primary Hamlin reference with the Ellis et al. reference is unmotivated and contrary to the purpose of the Hamlin reference.

Regarding claims **1-6, 8-16, 21, 23-28, 30, 32-36, 42-49, 51, 53-59, 63-66, 68, 70,** and **74**, the appellant argues that the Section 103 rejections must be reversed, because the cited Hamlin reference does not teach or suggest the claimed limitations as indicated and because the Hamlin reference cannot be modified with the Ellis et al. reference to function in accordance with either the claimed invention or in a manner consistent with the purpose of the Hamlin reference. The appellant argues that the rejection fails to cite any teaching or suggestion of the storage of external-services data or of the two-way communication of such data with telephony appliances. The appellant further argues that the examiner fails to offer any suggestion of motivation for modifying the Hamlin reference and that the examiner further fails to cite evidence as to how the Hamlin reference could function as modified. The examiner respectfully disagrees and addresses the appellant's arguments in response to Arguments 1A and 1B below.

Argument 1A: The proposed combination of references does not correspond to the claimed limitations.

Regarding all grounds of rejection, the appellant argues that the proposed combination of the Ellis et al. reference with the Hamlin reference does not teach or suggest claimed limitations including those directed to a data memory circuit that stores packet-based data (or external-services data), and the selective routing of stored data to appliances that provide bi-directional telephony services. The appellant specifically argues that Ellis et al.'s discussion of its server 80 does not teach the configured storage and routing of external services data and that there is no

teaching or suggestion supporting the examiner's assertion that Hamlin's database 48 can store and provide external-services data as suggested. The examiner respectfully disagrees.

Hamlin discloses a home 12 that receives mass media signals 22 from outside the home by way of a variety of mediums, including television 24 26 30 and telephone 37 lines, amongst others (col. 2, l. 58-67; col. 3, l. 1-2; & Fig. 1). The distinct input media signals 22 are received by a converter 34, where the media signals 22 of various signal types are converted and transmitted along a communication bus 36 throughout the house 12. The communication bus 36 can be any communication bus network (col. 3, l. 3-12). A system controller 38 and multiple interface pods 44 are coupled to the communication bus 36 (col. 3, l. 13-16). Each interface pod has coupled to it one or two receiving units 46 (col. 3, l. 17-18). A hand-held remote controller 42 transmits signals to, and receives signals from, a signal transceiver 40, which sends the commands to the system controller 38 (col. 3, l. 19-23). The system controller 38 outputs a control signal 82 onto the bus for routing the media signals to the appropriate receiver (col. 6, l. 66-67 & col. 7, l. 1-32). The system controller 38 is preferably a personal computer (PC) (col. 3, l. 59-60 & Fig. 3) and contains a system database storage 48, such as a disk drive, that holds data, such as information on the status of the distribution system 10. The examiner interprets the system database storage 48 as being a data memory circuit, as claimed. The system database stores each frequency of the common bus signal to which an incoming signal has been converted, interface pod address locations, addresses of all receiving locations, and the type of receiving unit 46 coupled to each interface pod 44. Essentially, the system database 48 stores all information necessary for the system controller 38 to identify the location of all components of the signal distribution system 12, and to monitor whatever activity is occurring at each location

(col. 4, l. 16-26). Upon request, information, such as stock reports, can be received over a telephone line 37, routed to a particular room in the house, and displayed on a TV (col. 5, l. 66-67 & col. 7, l. 1-7). The examiner interprets telephony-based appliances to be devices that receive data sent over a telephone network. Since Hamlin discloses routing telephone network data to pods and receiving units in the home, the examiner interprets the pods and receiving units of Hamlin as being "a plurality of telephony-based appliances communicatively coupled to the bussing arrangement, wherein the plurality of appliances provide bi-directional telephony services using at least one of: audio, video, and data signals," as claimed.

As noted by the examiner in the Office Action mailed 7/11/2006, Hamlin does not specifically disclose storing packet-based/external-services data in a data memory circuit. Ellis et al. discloses an interactive television program guide system for a household in which multiple interactive television program guides within the household are coordinated (p. 1, paragraph 9). Certain program guide functions require the user television equipment to communicate with television distribution facility over telephone lines (p. 4, paragraph 68). Each piece of user television equipment is located in a different part of the home (p. 1, paragraph 10). A server (PC with data memory circuit) is used to implement certain program guide features and the pieces of user television equipment in the home act as clients (p. 2, paragraph 15). The server handles data distribution tasks and stores information, such as text, graphics, and video, in a client-server based interactive television program guide system (p. 3, paragraph 62). Video and audio data can be distributed to the home via the Internet (packet-based network)(p. 6, paragraph 84 & Fig. 8). Figures 3-5 illustrate different network arrangements within the home, with figure 5 illustrating a client-server architecture in which the server is placed within the home. The server

80 is connected to user television equipment 81, 82, and 83 via communication paths 85. Communication paths 85 may be any in-home network suitable for distributing the locally stored video, audio, and data (p. 5, paragraphs 74, 79 & Fig. 5). As described above, Ellis et al. teaches a server storing and routing externally received text, graphics, video, and audio to equipment within a home. As a result, the examiner maintains that Ellis et al. teaches a data memory circuit that stores packet-based data (or external-services data), and the selective routing of stored data to appliances that provide bi-directional telephony services, as claimed. The examiner further maintains that, at the time that the invention was made, one of ordinary skill in the art would recognize that Hamlin's PC with system storage database 48 could be modified, such as that taught by Ellis et al.'s media storage and distribution server.

Argument 1B: The proposed modification of the Hamlin reference is unmotivated.

Regarding all grounds of rejection, the appellant argues that the Section 103 rejections must be reversed, because there is no motivation to modify the primary Hamlin reference with the Ellis et al. reference. The appellant specifically argues that the examiner has not presented any evidence from the asserted references indicating that a skilled artisan would use (or modify) the cited references to correspond to the claimed invention and instead has used hindsight reasoning in an attempt to piece together disparate teachings. The appellant further specifically argues that the examiner's opinion regarding motivation for the proposed modification of the Hamlin reference is flawed, because the alleged motivation is silent as to any storage and distribution of external-services data (for telephony devices) as claimed, is silent as to any motivation for modifying Hamlin's database to store external-services data, and thus is unrelated

to the proposed modification of the Hamlin reference. The examiner respectfully disagrees. The examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

As noted above with respect to Argument 1A, both Hamlin and Ellis et al. disclose computers for handling data distribution tasks. Hamlin discloses a signal distribution system capable of receiving any type of distinct inputted mass media signal 22 and converting it into the format of the common bus (col. 7, l. 14-17). Hamlin further discloses that the bus can be any type of communication bus network capable of accommodating both digital and analog signals (col. 3, l. 9-10 & col. 7, l. 34-36). Hamlin also discloses receiving information for display over telephone lines upon request (col. 5, l. 66-67 & col. 6, l. 1-7). Hamlin still further discloses a system database storage 48 within a PC for storing information on the communication system, but fails to disclose storing packet-based/external-services data within the database storage for distribution throughout the system. Ellis et al. teaches that information, such as text, graphics, audio, video, and data, may be packet-based and requested and received over a telephone line (p. 6, paragraph 85). Ellis et al. further discloses an in-home server for storing and distributing the information to user television equipment throughout the home (p. 3, paragraph 62; p. 5, paragraph 74; & Fig. 5). The examiner acknowledges the appellant's argument that it would not have been obvious to modify Hamlin "to use a typical client-server architecture in the home for storing and serving video and other data to devices in the home" and that replacing Hamlin's

database with something that can store video data would have added significant cost and complexity to Hamlin's system; however, the examiner respectfully disagrees. Firstly, Appellant's statement is factually unsupported in the record. Secondly, Hamlin states that home owners commonly have several video cassette recorders (VCR's) spread through their homes and could quickly become frustrated by ongoing requirements to update their equipment (col. 1, l. 45-52). One of ordinary skill in the art at the time that the invention was made would have recognized that replacing multiple pieces of equipment with a server for use in a client-server arrangement would result in a significant reduction of cost and complexity to Hamlin's system.

Argument 2: The section 103 rejection of claim 20 and 50 should be reversed for the reasons stated above with the first Ground of rejection and because the modification of the Hamlin reference with the Goldstein reference is further unmotivated.

Regarding claims **20** and **50**, the appellant argues that the rejection is improper, because the Final Office Action failed to cite any evidence of motivation for modifying Hamlin to include Goldstein's remote-control configuration using a security-code. The appellant specifically argues that the examiner's opinion that it would have been obvious "to use a security code in the remote controller, in order to allow for tighter security and use by only those authorized users" fails to describe where Hamlin uses a remote controller or why Hamlin would be susceptible to any security issues. The examiner respectfully disagrees. The examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally

available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

As noted above with respect to Argument 1A, Hamlin discloses a remote controller 42 that directs mass media signals 22 to be distributed to rooms 14, 16, 18, 20 in house 12 in response to user commands (col. 5, l. 46-50). Hamlin is silent as to the use of security provisions within the remote controller. Goldstein discloses a universal remote control for controlling a variety of consumer products (col. 3, l. 14-17). Goldstein further states that it is desirable to add security provisions to remote control devices, so that they cannot be used on another cable system without authority of the cable system and further so that the owner of the devices would be protected from unauthorized use on such additional cable systems (col. 3, l. 1-11). One of ordinary skill in the art at the time that the invention was made would have recognized the benefit of modifying the remote controller of Hamlin to use a security code in order to allow for tighter security and use by only those authorized users, such as that taught by Goldstein.

Argument 3: The Section 103 rejection of claims 7, 22, 29, 31, 37-41, 67, and 75 should be reversed for the reasons stated above with the first Ground of rejection, and because the modification of the Hamlin reference with the Edens reference is further unmotivated.

Regarding claims **7**, **22**, **29**, **31**, **37-41**, **67**, and **75**, the appellant argues that the rejection is improper, because the Final Office Action fails to cite any evidence of motivation for modifying Hamlin. The appellant specifically argues that the examiner's opinion as to the modification of Hamlin's frequency-based system "to include DTMF-tone control" fails to cite

any evidence supporting the modification of the Hamlin reference to include any additional circuitry, programming, or other items to facilitate the proposed modification, nor do any of the rejections describe how the Hamlin reference could operate as so modified. The examiner respectfully disagrees. The examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

As noted with respect to Argument 1A above, Hamlin discloses sending telephone signals over a common bus (col. 2, l. 67; col. 5, l. 66-67; col. 6, l. 1-7; & Fig. 1) and sending control signals over the bus (col. 6, l. 18-20). Hamlin is silent as to including DTMF-tone control. Edens et al. discloses a home network interconnecting a variety of home appliances (Fig. 1). Edens et al. further discloses transmitting DTMF tone control signals over the home network (col. 96, l. 36-46). The examiner notes that DTMF signaling is commonly used for telephone signaling over telephone networks. Hamlin states an undesirability in the constant updating of equipment within the home to comply with new formats or configurations of signals (col. 1, l. 40-52). Edens et al. also states a desirability to create a network that is compatible with existing consumer electronics devices (col. 9, l. 39-43). As such, one of ordinary skill in the art at the time that the invention was made would have recognized the benefit of using DTMF tones in order to allow for remote controllable processing and programming within the system using pre-existing DTMF functionality.

Argument 4: The Section 103 rejection of claims 17-19, 52, and 60-62 should be reversed for the reasons stated above with the first Ground of rejection, and because the modification of the Hamlin reference with the Cohen et al. reference is further unmotivated.

Regarding claims **17-19**, **52**, and **60-62**, the appellant argues that the rejections are improper, because the Final Office Action failed to show any teaching or suggestion of all of the claimed limitations, and further because the Action failed to cite any evidence of motivation for modifying Hamlin to include the various subject matter cited in the Cohen et al. reference. The appellant specifically argues that the Final Office Action fails to cite any portion of Cohen et al. that teaches or suggests the limitations of claim 17. The appellant further specifically argues that the motivation "to create a more comprehensive and consistent facility" is confusing in its applicability to either the Hamlin reference or the claimed limitations and any modification of Hamlin to include converting word-processing data to audio data. The examiner respectfully disagrees. The examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

As noted with respect to Argument 1A above, Hamlin discloses an in-home computer for handling information distribution. Hamlin is silent as to converting word processing data into

audio data. Cohen et al. discloses a unified messaging system that can convert text messages into audio messages. Cohen et al. further states that this is useful in providing information to retrieval devices with technological limitations, such as a conventional voice telephone (col. 2, l. 57-67 & col. 3, l. 1-3). One of ordinary skill in the art would have recognized the benefit of modifying Hamlin to provide a comprehensive and consistent facility for distributing information to a variety of home appliances, such as that taught by Cohen et al.

Argument 5: The Section 103 rejection of claims 69 and 71-73 should be reversed for the reasons stated above with the first Ground of rejection, and because the modification of the Hamlin reference with the Lewis reference is further unmotivated.

Regarding claims **69** and **71-73**, the appellant argues that the rejections are improper, because the Final Office Action fails to show teaching or suggestion of all of the claimed limitations, and further fails to cite any evidence of motivation for modifying Hamlin to include the various subject matter cited in the Lewis reference. The appellant specifically argues that the supposition that Lewis utilizes some sort of subscription package to manage accounts and billing falls far short of the Section 103 requirement that the cited references teach or suggest all of the claim limitations. The appellant further specifically argues that the examiner states an opinion (to allow for pay-per-view movies and more options for standard interactive television within the home system) as to the desirability of the proposed modification, without citing any supporting evidence. The examiner respectfully disagrees. The examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the

claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

As noted with respect to Argument 1A, Hamlin discloses a communication bus that receives a variety of television signals and communicates them to televisions throughout the home (col. 5, l. 46-54 & Fig. 1). Hamlin is silent as to the routing data including the assignment of a particular television subscription package to a TV. Lewis discloses a closed cable network within a building that receives program source material from a pay per view system and directs the pay per view material to a room that ordered the material (col. 6, l. 25-33 & col. 8, l. 42-48). Lewis further states a need within the art for a system that allows a user to interactively access information outside of a network without requiring additional equipment within each user location (col. 1, l. 29-36). One of ordinary skill in the art at the time that the invention was made would have recognized the benefit of modifying the combination of Hamlin and Ellis et al. to include sending pay per view data to the television equipment of a requesting room, such as that taught by Lewis in order to allow for access to pay-per-view movies and other options without requiring additional equipment within the user location, such as that taught by Lewis.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Michael Van Handel

Conferees:

Scott Beliveau

Andrew Koenig

SCOTT E. BELIVEAU
PRIMARY PATENT EXAMINER
Acting SPE 2623

ANDREW Y. KOENIG
PRIMARY PATENT EXAMINER
Acting, SPE